

107TH CONGRESS
1ST SESSION

H. R. 2626

To authorize research, development, demonstration, and commercial application activities relating to clean coal technologies, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 25, 2001

Mr. BOEHLERT introduced the following bill; which was referred to the
Committee on Science

A BILL

To authorize research, development, demonstration, and commercial application activities relating to clean coal technologies, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Clean Coal Power Ini-
5 tiative Act of 2001”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

8 (1) reliable, affordable, increasingly clean elec-
9 tricity will continue to power the growing United
10 States economy;

1 (2) an increasing use of electrotechnologies, the
2 desire for continuous environmental improvement, a
3 more competitive electricity market, and concerns
4 about rising energy prices add importance to the
5 need for reliable, affordable, increasingly clean elec-
6 tricity;

7 (3) coal, which, as of the date of enactment of
8 this Act, accounts for more than ½ of all electricity
9 generated in the United States, is the most abun-
10 dant fossil energy resource of the United States;

11 (4) coal comprises more than 85 percent of all
12 fossil resources in the United States and exists in
13 quantities sufficient to supply the United States for
14 250 years at current usage rates;

15 (5) investments in electricity generating facility
16 emissions control technology over the past 30 years
17 have reduced the aggregate emissions of pollutants
18 from coal-based generating facilities by 21 percent,
19 even as coal use for electricity generation has nearly
20 tripled; and

21 (6) continued environmental improvement in
22 coal-based generation through continued research,
23 development, demonstration, and commercial appli-
24 cation toward an ultimate goal of near-zero emis-
25 sions is important and desirable.

1 **SEC. 3. CLEAN COAL POWER INITIATIVE.**

2 (a) IN GENERAL.—The Secretary of Energy (in this
3 Act referred to as the “Secretary”) shall carry out a pro-
4 gram of research on and development, demonstration, and
5 commercial application of clean coal technologies under—

6 (1) this Act;

7 (2) the Federal Nonnuclear Energy Research
8 and Development Act of 1974 (42 U.S.C. 5901 et
9 seq.);

10 (3) the Energy Reorganization Act of 1974 (42
11 U.S.C. 5801 et seq.); and

12 (4) title XIII of the Energy Policy Act of 1992
13 (42 U.S.C. 13331 et seq.).

14 (b) CONDITIONS.—The research, development, dem-
15 onstration, and commercial application program described
16 in subsection (a) shall be designed to achieve cost and per-
17 formance-based goals established by the Secretary under
18 section 4.

19 **SEC. 4. COST AND PERFORMANCE-BASED GOALS.**

20 (a) REVIEW AND ASSESSMENT.—The Secretary shall
21 perform an assessment that establishes measurable cost
22 and performance-based goals for 2005, 2010, 2015, and
23 2020 for the programs authorized by this Act. Such as-
24 sessment shall be based on the latest scientific and tech-
25 nical knowledge, and shall also take into consideration, as
26 appropriate, the comparative environmental impacts (in-

cluding emissions of greenhouse gases) of the energy saved
or produced by specific programs.

(b) CONSULTATION.—In establishing the measurable
cost and performance-based goals under subsection (a),
the Secretary shall consult with the private sector, institu-
tions of higher learning, national laboratories, environ-
mental organizations, professional and technical societies,
and any other persons as the Secretary considers appro-
priate.

(c) SCHEDULE.—The Secretary shall—

(1) issue and publish in the Federal Register a
set of draft measurable cost and performance-based
goals for the programs authorized by this Act for
public comment—

(A) in the case of a program established
before the date of the enactment of this Act,
not later than 120 days after the date of the
enactment of this Act; and

(B) in the case of a program not estab-
lished before the date of the enactment of this
Act, not later than 120 days after the date of
establishment of the program;

(2) not later than 60 days after the date of
publication under paragraph (1), after taking into
consideration any public comments received, trans-

1 mit to the Congress and publish in the Federal Reg-
2 ister the final measurable cost and performance-
3 based goals; and

4 (3) update all such cost and performance-based
5 goals on a biennial basis.

6 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

7 (a) CLEAN COAL POWER INITIATIVE.—Except as
8 provided in subsection (c), there are authorized to be ap-
9 propriated to the Secretary to carry out the Clean Coal
10 Power Initiative under section 3 \$200,000,000 for each
11 of the fiscal years 2002 through 2011, to remain available
12 until expended.

13 (b) OTHER COAL AND RELATED TECHNOLOGIES
14 PROGRAMS.—Except as provided in subsection (c), there
15 are authorized to be appropriated to the Secretary
16 \$172,000,000 for fiscal year 2002, \$179,000,000 for fis-
17 cal year 2003, and \$186,000,000 for fiscal year 2004, to
18 remain available until expended, for other coal and related
19 technologies research and development programs, which
20 shall include—

- 21 (1) Innovations for Existing Plants;
22 (2) Integrated Gasification Combined Cycle;
23 (3) advanced combustion systems;
24 (4) Turbines;
25 (5) Sequestration Research and Development;

- 1 (6) innovative technologies for demonstration;
- 2 (7) Transportation Fuels and Chemicals;
- 3 (8) Solid Fuels and Feedstocks;
- 4 (9) Advanced Fuels Research; and
- 5 (10) Advanced Research.

6 (c) LIMIT ON USE OF FUNDS.—Notwithstanding
7 subsections (a) and (b), no funds may be used to carry
8 out the activities authorized by this Act after September
9 30, 2002, unless the Secretary has transmitted to the Con-
10 gress the report required by this subsection and 1 month
11 have elapsed since that transmission. The report shall
12 include—

13 (1) with respect to subsection (a), a 10-year
14 plan containing—

15 (A) a detailed assessment of whether the
16 aggregate funding levels provided under sub-
17 section (a) are the appropriate funding levels
18 for that program;

19 (B) a detailed description of how proposals
20 will be solicited and evaluated, including a list
21 of all demonstration activities expected to be
22 undertaken;

23 (C) a detailed list of technical milestones
24 for each coal and related technology that will be
25 pursued;

1 (D) recommendations for a mechanism for
2 recoupment of Federal funding for successful
3 commercial projects; and

4 (E) a detailed description of how the pro-
5 gram will avoid problems enumerated in Gen-
6 eral Accounting Office reports on the Clean
7 Coal Technology Program, including problems
8 that have resulted in unspent funds and
9 projects that failed either financially or scientif-
10 ically;

11 (2) with respect to subsection (b), a plan
12 containing—

13 (A) a detailed description of how proposals
14 will be solicited and evaluated, including a list
15 of all demonstration activities expected to be
16 undertaken; and

17 (B) a detailed list of technical milestones
18 for each coal and related technology that will be
19 pursued; and

20 (3) a description of how the programs will be
21 carried out under subsection (a) and subsection (b)
22 so as to complement each other and not duplicate
23 activities.

1 (d) APPLICABILITY.—Subsection (c) shall not apply
2 to any program, project, or activity begun before Sep-
3 tember 30, 2001.

4 **SEC. 6. PROJECT CRITERIA.**

5 (a) IN GENERAL.—The Secretary shall not provide
6 funding for any research, development, demonstration, or
7 commercial application of coal and related technologies
8 that do not advance efficiency, environmental perform-
9 ance, and cost competitiveness well beyond the level of
10 technologies that are in operation or have been dem-
11 onstrated as of the date of the enactment of this Act.

12 (b) TECHNICAL CRITERIA FOR CLEAN COAL POWER
13 INITIATIVE.—

14 (1) SEQUESTRATION AND GASIFICATION.—(A)
15 In allocating the funds authorized under section
16 5(a), the Secretary shall ensure that at least 80 per-
17 cent of the funds are used only for projects on car-
18 bon sequestration, or coal-based gasification tech-
19 nologies, including gasification combined cycle, gas-
20 ification fuel cells, gasification coproduction and hy-
21 brid gasification/combustion.

22 (B) The Secretary shall set technical milestones
23 specifying emissions levels that coal gasification
24 projects must be designed to and reasonably ex-
25 pected to achieve. The milestones shall get more re-

1 strictive through the life of the program. The mile-
2 stones shall be designed to achieve by 2020 coal gas-
3 ification projects able—

4 (i) to remove 99 percent of sulfur dioxide;

5 (ii) to emit no more than .05 lbs of NOx
6 per million BTU;

7 (iii) to remove 95 percent of mercury; and

8 (iv) to achieve a thermal efficiency of 60
9 percent (higher heating value).

10 (2) OTHER PROJECTS.—For projects not de-
11 scribed in paragraph (1), the Secretary shall set
12 technical milestones specifying emissions levels that
13 the projects must be designed to and reasonably ex-
14 pected to achieve. The milestones shall get more re-
15 strictive through the life of the program. The mile-
16 stones shall be designed to achieve by 2010 projects
17 able—

18 (A) to remove 97 percent of sulfur dioxide;

19 (B) to emit no more than .08 lbs of NOx
20 per million BTU;

21 (C) to remove 90 percent of mercury; and

22 (D) to achieve a thermal efficiency of 45
23 percent (higher heating value).

24 (c) FINANCIAL CRITERIA.—The Secretary shall not
25 provide a funding award for any research, development,

1 demonstration, or commercial application of coal and re-
2 lated technologies unless the recipient of the award has
3 documented to the satisfaction of the Secretary that—

4 (1) the award recipient is financially viable
5 without the receipt of additional Federal funding;

6 (2) the recipient will provide sufficient informa-
7 tion to the Secretary for the Secretary to ensure
8 that the award funds are spent efficiently and effec-
9 tively; and

10 (3) a market exists for the technology being
11 demonstrated or applied, as evidenced by statements
12 of interest in writing from potential purchasers of
13 the technology.

14 (d) FEDERAL SHARE.—The Federal share of the cost
15 of a coal or related technology project funded by the Sec-
16 retary shall not exceed 50 percent.

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